

optic polarization modulation by a nonlinear device, and subclasses 328 + for optical harmonic generators which could use nonlinear optics.

123

OPTICAL FIBER WAVEGUIDE WITH CLADDING:

This subclass is indented under the class definition.

Subject matter wherein a low refractive index sheathing or covering surrounds a higher index of refraction core of an optical fiber, in order to confine light in the core by means of total internal reflection.

- (1) Note. The fiber waveguides of this subclass are of generally cylindrical configuration.
- (2) Note. Planar type optical waveguides are provided for in subclass 129.

SEE OR SEARCH THIS CLASS, SUBCLASS:

100+, for an optical transmission cable which provides protection to the fibers therein.

115+, for an optical fiber bundle.

SEE OR SEARCH CLASS:

- 65, Glass Manufacturing, 385+ for processes of forming optical fibers or waveguides, particularly subclasses 413 + for processes of depositing a clad by vapor deposition; subclasses 420 + for processes of doping a clad; and subclass 405 for processes of simultaneously forming clad and core.
- 264, Plastic and Nonmetallic Article Shaping or Treating: Processes, 1.24+ for shaping, treating, or extruding optical fibers, waveguides, or preforms.
- 428, Stock Material or Miscellaneous Articles, 364+ for fiber stock material.
- 505, Superconductor Technology: Apparatus, Material, Process, appropriate subclasses for superconductors which could be in optical fiber form.

124

With graded index core or cladding:

This subclass is indented under subclass 123.

Subject matter wherein the index of refraction of the core or cladding material varies axially or radially.

125

Utilizing nonsolid core or cladding:

This subclass is indented under subclass 123.

Subject matter wherein the core or cladding material is a liquid or gas.

126

Utilizing multiple core or cladding:

| | |
|---------------------------|--|
| Graded-Index Fiber | Optical fiber in which the refractive index of the core is in the form of a parabolic curve, decreasing toward the cladding. |
| Step Index Fiber | An optical fiber, either multimode or single mode, in which the core refractive index is uniform throughout so that a sharp step in refractive index occurs at the core to cladding interface. It usually refers to a multimode fiber. |